**Online Ordering System**

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| **Address** |
| \_streetAddress:string  \_city:string  \_stateProvince:string  \_country:string |
| Address(streetAddress:string, city:string, stateProvince: string, country: string)  IsInUsa():bool  GetFullAddressString():string |

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| **Order** |
| \_products:List<Product>  \_customer:Customer  USA\_SHIPPING\_COST:double  OVERSEAS\_SHIPPING\_COST:double |
| Order(customer:Customer)  AddProduct(product:Product):void  GetTotalPrice():double  GetPackingLabel():string  GetShippingLabel():string |

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| **Product** |
| \_name:string  \_productId:string  \_pricePerUnit:double  \_quantity:int |
| Product(name:string, productid:string, pricePerUnit:double, quantity:int)  GetName():string  GetProductId():string  GetTotalCost():double |

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| **Customer** |
| \_name:string  \_address:Address |
| Customer(name:string, address:Address)  GetName():string  GetAddress():Address  LivesInUSA():bool |

**Brief Description**

The Product class models a real world product with properties like name, quantity, ID and price. These variables are private and accessible through public methods. The Order class models a customer’s order. Products are added to the customer’s order through the order object that contains a list of type Product. When a customer makes an order, the order class instantiates an order object that calls the “AddProduct” method (which is a list of type Product) to add products to the customer’s order. Other information about the customer’s order is gotten by iterating through the product list and calling for example, the “GetShippingLabel” method on the product. This method in turn gets the customer’s name and address by calling the GetName and GetAddress methods of the Customer class on the customer object.

**Youtube Video Tracker**

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| **Video** |
| \_title:string  \_author:string  \_lengthInSeconds:int  \_comments:List<Comment> |
| Video(title:string, author:string, lengthInSeconds:int)  AddComment(comment:Comment):void  GetNumberOfComments():int  GetTitle():string  GetAuthor():string  GetLengthInSeconds():int  GetComments():List<Comment> |

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| **Comment** |
| \_commenterName:string  \_commenterText:string |
| Comment(commenterName:string, commentText:string)  GetCommenterName():string  GetCommentText():string |

**Brief Description**

The “Comment” class models a real-world comment that stores 2 variables: the comment and the commenter’s name. The “Video” class also conceptualizes an actual video with properties like name, title, author, length and comments. The “Video” class also contains a list of type “Comment”, which is a container for the comments allowing the comments to be accessed through the “Video” object. After the Video object is created using the Video class, meta-data like name, title can be accessed by calling the “GetAuthor” and “GetTitle” methods which access the private variables of the Video class. The number of comments can be accessed from the Video class by calling the “GetComment” method on the List object created in the Video class using the Comment class. Comments are added by calling the “AddComment” method of the Video class on the Comment object(\_comment) that is inside the Video class. Also, the comments together with commenter names can be viewed simply by returning the List object (of type comment) in the Video class.